



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,095	05/11/2001	James E. Kocol	SUN-P5390-RJL	7707

22835 7590 06/04/2004

PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

DOOLEY, MATTHEW C

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 06/04/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

P24

Office Action Summary

Application No.

09/854,095

Applicant(s)

KOCOL ET AL.

Examiner

Matthew C. Dooley

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claims 1 and 10 have been amended to include "the error detection and correction mechanism determines that the location has been checked out to the processor cache". Nowhere in the specification or drawings is there enablement for the checking out of a memory location to a cache. While data stored in memory locations can be moved, memory locations are known to be unmovable. As there is a lack of enablement for these limitations, claims 1 and 10 are rejected under 35 U.S.C. 112, first paragraph. Moreover, as claims 2-9 and 11-18 further limit rejected claims 1 and 10, they too are rejected under 35 U.S.C. 112, first paragraph.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

Art Unit: 2133

regards as the invention. Independent claims 1 and 10 have been amended to include “wherein after examining and possibly correcting” and “configured to read and possibly correct”. Claim 1 and 10 put forth an apparatus for memory correction. The language suggests that data in the locations are possibly corrected, however, this leaves open the possibility that the data is left uncorrected. As such, this defeats the intended use of the invention, and makes it inoperable for its purpose of memory correction. Language should be added that clarifies that the data is corrected only when errors are detected, and skipped otherwise, thus eliminating the ambiguity raised by the term “possibly”. As claims 2-9 and 11-18 further limit rejected claims 1 and 10, they too are rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzales et al., U.S. 6,101,614.

As per claim 19:

Gonzales teaches to marking a memory location when data from said location is read out to a cache, scrubbing the system using an error correction and detection system to correct errors in the main memory, detecting the memory tag corresponding to a cache,

Art Unit: 2133

reading the data from the cache, correcting the data, and writing the data to the memory (Col.3: 1-34, 41-50).

As per claim 20:

The memory checking operation of Gonzales includes accessing the memory, locating the valid copy of the data in the cache, reading the copy, and correcting errors in the data, writing the corrected results to a memory location, and repeating the above steps for each memory location (Col.3: 1-34, 41-50).

7. Claims 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Epsie et al., U.S. 6,076,183.

As per claim 19:

Epsie teaches to marking a memory location when data from said location is read out to a cache, scrubbing the system using an error correction and detection system to correct errors in the main memory, detecting the memory tag corresponding to a cache, reading the data from the cache, correcting the data, and writing the data to the memory (Fig.4,5; Col.2:30 – Col.3:4; Col.8:37 – Col.9:55)

As per claim 20:

The memory checking operation of Epsie includes accessing the memory, locating the valid copy of the data in the cache, reading the copy, and correcting errors in the data, writing the corrected results to a memory location, and repeating the above steps for each memory location (Fig.4,5; Col.2:30 – Col.3:4; Col.8:37 – Col.9:55).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Dooley whose telephone number is (703) 306-5538. The examiner can normally be reached on M-F 8:30-5:00.

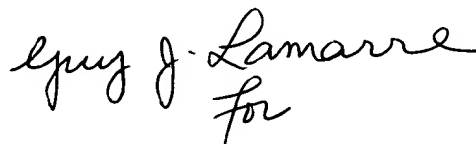
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2133

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew Dooley
Examiner AU 2133
05/27/04



Albert DeCady
Primary Examiner